

National Transportation Safety Board
Washington, DC 20594

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Brief of Accident

Adopted 10/19/2009

DFW08FA234 File No. 25950	09/18/2008	Douglas, KS	Aircraft Reg No. N162XP	Time (Local): 11:45 CDT		
Make/Model:	Cessna Acft Co / E162			Fatal	Serious	Minor/None
Engine Make/Model:	Cont Motor / O-200		Crew	0	0	1
Aircraft Damage:	Substantial		Pass	0	0	0
Number of Engines:	1					
Operating Certificate(s):	None					
Type of Flight Operation:	Flight Test					
Reg. Flight Conducted Under:	Part 91: General Aviation					
Last Depart. Point: Wichita, KS			Condition of Light: Day			
Destination: Local Flight, KS			Weather Info Src: Pilot			
Airport Proximity: Off Airport/Airstrip			Basic Weather: Visual Conditions			
			Lowest Ceiling: None			
			Visibility: 10.00 SM			
			Wind Dir/Speed: Light and Variable			
			Temperature (°C): 19			
			Precip/Obscuration: No Obscuration; No Precipitation			
Pilot-in-Command	Age: 70		Flight Time (Hours)			
Certificate(s)/Rating(s)			Total All Aircraft: 8914			
Commercial; Multi-engine Land; Single-engine Land			Last 90 Days: 69			
			Total Make/Model: 62			
Instrument Ratings			Total Instrument Time: UnK/Nr			
Airplane						

The purpose of the engineering test flight was to obtain an assessment of the special light sport airplane's spin characteristics. Sixteen spins, with the aircraft in four different configurations, were planned. The aircraft successfully completed the first configuration with a set of four spins. The pilot then completed three of the four spins in the second set of spin testing. With the aircraft at 10,000 feet, the pilot initiated a spin to the left. Once the spin was established, the pilot made the planned control inputs. Despite several attempts by the test pilot to recover the aircraft from the maneuver, the aircraft continued to spin. At the planned altitude of 6,000 feet, the pilot elected to deploy the aircraft's recovery parachute and pulled the chute's activation handle. The parachute did not deploy, and the aircraft continued to spin. The pilot then elected to jettison the cabin door, exit the airplane, and deploy his parachute. The airplane descended into terrain and was substantially damaged. During a subsequent review of flight test data, the airplane manufacturer discovered that an unrecoverable spin could develop in the prototype airplane. An examination of the aircraft's parachute system revealed that the rocket system used to deploy the chute had activated, however; the parachute failed to be pulled from its canister. The parachute's incremental cord was found, and inspected; the entire series of "bar tabs" were torn; an indication that the rocket motor pulled with its full force. The signatures observed on the parachute system and aircraft components were consistent with parachute system cable contacting the right flap cable/turn buckle cable during the rocket launch sequence, compromising the parachute's deployment.

Updated at Oct 20 2009 1:50PM

Brief of Accident (Continued)

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OCCURRENCES

Maneuvering - Simulated/training event
Maneuvering - Aerodynamic stall/spin
Uncontrolled descent - Sys/Comp malf/fail (non-power)
Uncontrolled descent - Collision with terr/obj (non-CFIT)

FINDINGS

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-(general)-Attain/maintain not possible - C
Aircraft-Aircraft systems-Equipment/furnishings-Parachute-Failure - F

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows.
The airplane's inability to recover from an intentional spin, despite proper control inputs by the flight test pilot. Contributing to the accident was the failure of the airplane's ballistic parachute system to properly deploy.